| Index of | Claims |
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Application/Control No. Examiner

Applicant(s)/Patent under Reexamination

NO NAME Art Unit

Rejected Allowed

(Through numeral) Cancelled Restricted

Non-Elected Interference

Appeal Α o Objected

| Cla         | aim Date   |          |            |              |  |              |            |                | . Cla    | Claim .  |     |            |          |          | Date .       |   |          |           |          | _ Cia        | im             |     | Date             |          |                |          |               |          |          |          |          |          |    |
|-------------|------------|----------|------------|--------------|--|--------------|------------|----------------|----------|--|-----|------------|----------|----------|--------------|---|----------|-----------|----------|--------------|----------------|-----|------------------|----------|----------------|----------|---------------|----------|----------|----------|----------|----------|----|
|             |            |          |            |              | $\Box$                                       |              | - 1        | Π              | П        |  | ſ   |            | _        | T        | Т            | Т                                       | Т        | T         | 1        | T            |                |     |                  | _        | T              | T        | T             | $\cdot$  | . Ţ      | T        | T        | T        | 7  |
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| -           |            |          | _          | -            |  | ۳            | $\Box$     | Н              | ┪        | ᅥ  | t   |            | 51       | ┪        | 寸            | 7                                       | 7        | ┰         | - -      | 7            | 11             | ļ   |                  | 101      | ╗              | _        | 7             | _        | ヿ        | 7        | ┪        | ┪        | ٦  |
| <u> </u>    | 2          |          | _          | ┝            | $\vdash$                                     |              | H          | H              |          |  | ŀ   |            | 52       | 7        | 一            |   | ┪        | +         | -        | - -          | 1-1            |     |                  | 102      | ┪              | 十        | 7             | -        | 一        | 7        | - -      | ┪        | 긕  |
|             | 3          | $\vdash$ | -          | -            | Н  | Н            | 7          | H              | $\dashv$ | ⊣  | ł   |            | (53)     | ᅥ        | -1           | ┪                                       | ┪        | +         | - -      | ┪╴           |                | 1   |                  | 103      | -              | $\dashv$ | -+            |          |          | ⊣        |          | ┥.       | :  |
| $\vdash$    | 4          |          | ┝          | Н            | -  |              | Н          | H              | $\dashv$ | 一  | ŀ   |            | 54       | ᅱ        | $\dashv$     | -                                       | -        | ┪         | ╅        | - -          | 1              |     |                  | 104      | -+             | 十        | +             | -        | ┪        | $\dashv$ | ╅        | -†-      | -: |
| $\vdash$    | 5          | -        | ⊢          | H            | Н  |              | Н          | Н              | $\dashv$ | $\dashv$   |     | -          | 55       | ᅱ        | $\dashv$     | $\dashv$                                |          | +         | +        | +            | +              |     |                  | 105      | ┪              | -+       | ┪             | ᆉ        |          | -        | +        | ╁        | ᅥ  |
| ├           | 6          | -        | ┝          | H            |  | Н            | Н          |                |          | ⊣  |     |            | 56       | -        |              | $\dashv$                                |          | +         |          | ╁            | +-             |     | <b></b>          | 106      | $\dashv$       | +        | -+            | $\dashv$ | -+       | -+       |          | +        | 긕  |
| <del></del> | 7          | -        | ⊢          | H            | Н  | Н            | -          | -              | Н        |  | 1   |            | 5Z       | $\dashv$ | -+           | $\dashv$                                | +        | ╌         | -+-      | ┿            | ┥┤             |     |                  | 107      | +              | +        | -             |          | -+       | -1       | ╅        |          | -{ |
|             |            | _        | -          | -            |  | -            | Н          | Н              | $\dashv$ | $\dashv$   | ŀ   |            | (58)     | $\dashv$ | $\dashv$     | -                                       | +        | +         |          | +            | +              |     | <b>-</b>         | 108      | $\dashv$       | ᅪ        | $\dashv$      | $\dashv$ | $\dashv$ |          |          | ╬        | -{ |
| <u> </u>    | B          | _        | <u> </u>   | -            | $\vdash$                                     | Н            | Н          | Н              |          | $\dashv$   |     | <u> </u>   |          | $\vdash$ |              |   | $\dashv$ |           |          | +            | +              |     | <del>  -</del> - | 109      |                | -        | ┥             |          | -        | -        | +        | +        | ᆜ  |
| <u> </u>    | 9          | <u> </u> | <b>-</b>   | -            | -  | -            | $\vdash$   | Н              | Н        | _  |     | _          | 59       | $\dashv$ | $\dashv$     |   | $\dashv$ | +         | - -      | -{-          | +-             |     |                  |          | -+             | +        | ┥             |          | $\dashv$ | -        | +        | +        | -; |
| <u> </u>    | 10         | <u> </u> | $\vdash$   | <del>-</del> | $\vdash$                                     |              |            | $\vdash\vdash$ | $\vdash$ |  |     | ⊢          | 8        | $\dashv$ | $\dashv$     |   |          | +         | +        | +            | +-             |     | <u> </u>         | 110      |                | 4        | -4            |          | $\dashv$ |          | +        | +        | نـ |
| <u></u>     | 11         | <u> </u> | <b> </b>   | <u> </u>     | Ш  | <b> </b>     |            | $\vdash$       | Ш        |  |     | <u> </u>   | 61       |          | _ļ           | _[                                      | -+       | +         | - -      | -1-          | $\dashv\dashv$ |     | <u> </u>         | 111      | <del>-</del> ļ | -        | 4             | -        | $\dashv$ | !        | -+       | -        | -! |
| <u></u>     | 12         | <u> </u> | -          | <u> </u>     | <u>                                     </u> |              |            | Ы              | Щ        |  |     | <b> </b> - | 62       |          | 4            | 4                                       | ᆜ.       | -         | - -      |              | 4-             |     |                  | 112      | -              | -        | $\dashv$      | -        | $\dashv$ |          | -        |          | !  |
|             | 13         | <u> </u> | <b> </b> - | <u> </u>     | <b> -</b>                                    | <b>-</b> -   | -          | Н              | Ш        |  |     | <u></u>    | 63       |          |              | _                                       | 4        |           | _        | +            | 4              |     |                  | 113      |                | -        | 4             | -        | $\dashv$ | -        | -        | - -      | ᆣ. |
| $\perp$     | 14         | <u> </u> | L-         | <b>—</b>     | <u> </u>                                     | <u> </u>     | <b> </b> _ | Ш              | Ш        |  |     | <b></b>    | 64       | $\sqcup$ | [            | _                                       | 4        | -         | 4-       |              |                |     | <u> </u>         | 114      |                | 4        |               | _        |          | -        | 4        | +        | 극  |
| <u></u>     | 15         | L        | L_         | <u> </u>     | <u> </u>                                     | <u> </u>     |            | Щ              |          | Щ  |     | <u> </u>   | 55       |          | _            | _                                       | 4        | -         | - -      | - -          |                |     | <u> </u>         | 115      |                | 4        | -             |          | -1       |          | -        | 4        | _; |
| <u></u>     | 16         | <u> </u> | ļ          | <u>Ļ</u> .   | <u> </u>                                     |              | <u> </u>   |                | Ш        | لـــا  |     |            | (66)     | Ш        |              | إ                                       | _        | _         | 4        | 4.           |                |     | <u> </u>         | 116      | $\dashv$       | -        | _             |          | $\dashv$ |          |          | 4        | _: |
| <u></u>     | 17         | <u> </u> | <u>_</u>   | oxdot        | <u> </u>                                     | $oxed{oxed}$ | <u> </u>   |                | Ш        |  |     |            | 67       | Ш        | Щ            | _                                       | _        | _         | 4        | 4-           | —              |     | <u> </u>         | 117      | _!             | _        | 4             | Ш        | ert      |          | $\dashv$ |          | -  |
|             | 18         | L        | _          | <u> </u>     | L  | _            | _          |                | Ш        |  |     |            | 58       | Ш        | Ш            | _                                       |          | $\perp$   | _        | +            |                | 1   |                  | 118      | $\sqcup$       |          | _             | Ш        | Щ        | _        | 4        | 1        | ᆜ  |
|             | 19         |          | L          | L            |  | _            | L          |                | L        |  |     | <u></u>    | 69       |          |              | اــــــــــــــــــــــــــــــــــــــ | _!       | 4         | _        | $\perp$      | $\perp$        |     | <u> </u>         | 119      | 니              | _        |               | Ш        | 니        |          | 4        | 4        | _  |
|             | 20         |          |            | 匚            |  |              |            |                |          |  | 1   | L          | 70       |          |              |   | _        | _         | _ļ_      | 1            |                | l   |                  | 120      |                |          | _             |          | Ш        | _        | _        | 4        | i  |
|             | 21         |          | L          | L            |  |              |            |                |          |  |     |            | 71       |          |              |   |          |           | 1        | <u>·  </u>   |                |     | Ш                | 121      |                | _        |               |          | Ш        |          | _        | _        |    |
|             | 22         | <b>.</b> |            |              |  |              |            |                |          |  |     | L          | (72)     |          |              |   |          |           | ┙        | ┸            |                |     | <u> </u>         | 122      |                | _        | _             |          | Ш        |          | $\dashv$ | 4        | _  |
|             | 23         |          |            | L            |  |              |            |                |          |  |     |            | 73       |          |              |   |          |           |          | $\perp$      |                |     | <u></u>          | 123      |                |          |               |          | Ш        |          | _        | _ _      | !  |
|             | 24         |          |            |              | l  |              | Ι.         |                |          |  |     |            | 74       |          |              |   |          | $\perp$   |          |              |                |     | <u> </u>         | 124      |                |          |               |          |          |          |          | _        | _  |
|             | 25         | П        |            | Π            | П  | Г            |            | Г              |          |  |     |            | 75       |          |              |   |          | $\Box$    |          |              |                |     | L                | 125      | Ш              |          |               | :        | Ш        |          | Ц        | _        |    |
|             | 26         | Г        | Π          | Т            | Г  | П            | Π          | Г              |          |  |     |            | 76       |          |              |   |          |           |          | ⊥            |                | ]   | L                | 126      |                |          |               | ئےا      | Ш        |          |          |          | _  |
|             | 25<br>(27) |          |            | Г            | Γ  |              | Г          | Π              | Γ        |  | ]   |            | 77       |          |              |   |          |           |          |              |                | Ì   | L                | 127      | Ш              | $\Box$   |               | L        | Ш        |          |          | _        | _  |
|             | 28         | Π        | 1          | 1            | П  |              | П          | Τ              | Г        | Г  | 1   |            | 78       | П        | П            |   |          | $\Box$    | Π.       |              | $\perp$        | ]   |                  | 128      |                |          |               |          | Ш        |          |          | _        | ÷  |
|             | 29         | Τ        | Т          | T            | П  |              | Π          | F              |          | Г  | 1   |            | 79       |          |              |   |          | $\Box$    | T        | $\mathbf{I}$ |                | ]   |                  | 129      |                |          |               | L        |          |          |          |          |    |
|             | 30         | Т        | Т          |              |  | Т            |            | Т              | Г        |  | 1   |            | 80       |          |              |   |          | 7         | 7        | Ī            | Т              | Ì   |                  | 130      |                |          |               |          |          |          |          | $\Box$   |    |
|             | 31         | 1        | 1          | 1            | 1  | 1            | $\vdash$   | 1              | $\vdash$ | Г  | 1   | -          | 81       | T        | $\Box$       |   | П        | $\neg$    | 7        | _            | $\neg$         | 1   |                  | 131      |                |          |               |          |          |          |          | $\Box$   | _  |
| -           | 32         | 1        | t          | 1            | T  | $\vdash$     | T          | 1-             | 1        | Г  | 1   | $\Box$     | 82       | 忊        |              | I                                       | П        | $\neg$    | 7        | $\neg$       | $\neg \vdash$  | 1   |                  | 132      | П              |          |               |          |          | $L^-$    |          | _T       |    |
| -           | 33         | Ĺ        | 十一         | †            | 1  | †            | 1          | 1-             | Т        | Т  | 1   |            | 83       | 1        | Γ-           | Г                                       | П        |           | 7        | 丁            | $\neg \neg$    | 1   |                  | 133      |                |          |               |          |          |          |          |          |    |
| $\vdash$    | 34         | $\vdash$ | T          | 1            | T  | T            | Т          | 1              | ✝        | Г  | 1   |            | 84       | Π        | <u> </u>     |   |          | $\Box$    | $\neg$   | T            |                | 1   |                  | 134      |                |          |               |          |          |          |          | $\Box$   |    |
| -           | 35         | 1        | ⇈          | 1            | T  | †            | Т          | 1              | T        | Г  | 1   | $\Box$     | 85       | t-       | П            | Г                                       | П        | $\neg$    | _        | 1            | 1              | 1   |                  | 135      |                |          |               |          |          |          |          |          |    |
| <b>—</b>    | 36         | †-       | ╈          | T            | 1  | †            | 1          | ╁              | T        | 1  | 1   | $\vdash$   | 86       | T        |              | $\vdash$                                | П        | 一         | 7        | 7            | 十              | 1 : |                  | 136      | П              |          |               |          |          |          |          |          |    |
| -           | 37         | +-       | T          | 1            | †  | 1            | ╁          | T              | t        | 1  | 1   | <u> </u>   | 87       | $\vdash$ | 1            | Г                                       | П        |           | $\dashv$ | 7            | $\neg$         | 1   | Г                | 137      |                |          |               | Γ        | Г        | $L^-$    |          | T        |    |
| -           | 38         | ╁        | ╁╌         | +-           | ╁  | ✝            | T          | +-             | ✝        | Н  | 1   |            | 88       | ┰        | T            | 1                                       | П        | $\Box$    | 7        | $\dashv$     | 1              | 1   | $\Box$           | 138      |                | П        | _             | Π        |          |          |          |          |    |
| -           | 39         | +-       | ✝          | T            | ✝  | 1            | 1          | ╁              | T        | 1-   | 1   |            | 89       | T        | t –          |   |          | $\vdash$  | 7        | 1            | 一              | 1   |                  | 139      |                |          |               |          |          |          |          |          | _  |
| -           | 40         | +        | 1          | ╁╌           | ╅  | 1            | +          | +              | 1        | т  | 1   | <b>—</b>   | 90       | 1        | 1            | 1                                       |          | Н         | 7        | 1            |                | 1   |                  | 140      | Π              | П        |               |          |          |          | П        | $\neg$   | _  |
| -           | 41         | ╁        | ╁          | ╁            | +-   | +            | 1-         | +              | †        | ┰  | 1   |            | 91       | †        | 1            | 1                                       |          | $\vdash$  | _†       | 7            | $\top$         | 1   |                  | 141      |                | П        |               | Г        | 1        | Π        | П        | T        | _  |
| $\vdash$    | 42         | ╁        | ╁          | ╁            | ╁  | +            | ╁          | +              | ┰        | <del>                                     </del> | 1   | -          | 92       | ✝        | 1            | T                                       |          |           | _        | $\dashv$     | $\top$         | 1   |                  | 142      | $\Box$         | П        |               | Г        | Т        | Π        | П        | T        | _  |
| $\vdash$    | 43         | +        | ╁          | +            | +  | +-           | +-         | ╁              | +-       | <del>                                     </del> | 1   | $\vdash$   | 93       | ╁╌       | 1            | t                                       | М        | H         | +        | +            | _              | 1   |                  | 143      | $\vdash$       | П        | $\overline{}$ | 1        | 1        | Г        | П        |          | _  |
|             | 44         | $\vdash$ | +-         | ╁            | ╁  | ╁            | +-         | +-             | ₩        | 1-   | 1   | $\vdash$   | 94       | ╁        | +-           | +-                                      |          | Н         | ┰        | -+           | $\dashv$       | 1   | <b>—</b>         | 144      | Т              | $\vdash$ | _             | 1        | 1-       | Г        | Н        | $\neg$   |    |
| <b>-</b>    | 45         | ╁╴       | ┿          | ╫            | ╁  | +            | ╁          | ╁              | +        | $\vdash$   | ┨   | $\vdash$   | 95       | ╁        | ╁╌           | <del>  -</del>                          | Н        | $\vdash$  | 十        | $\dashv$     | +              | 1   | $\vdash$         | 145      | 1              | М        |               | 1-       | 1        | $\vdash$ | Н        | -        |    |
| $\vdash$    |            | ╁        | ╁          | ╀            | ₩  | +            | +          | ╁              | ╂-       | $\vdash$   | ┨   | -          |          | ₩        | ╀            | ┢                                       | -        | Н         | ┪        | ┽            | +-             | 1   | -                | 146      | <del>  -</del> | Н        | _             | 1-       | T        | Т        | Н        | $\dashv$ | _  |
| <b> </b>    | 46         | ╂        | ╀          | ╀            | ╀  | +-           | ╀          | ╁              | ╀╌       | ⊢  | -   | ⊢          | 96       | ₩        | <del> </del> | ١-                                      | -        | Н         | -+       |              | +              | -   | -                | 147      | ╆              | $\vdash$ | $\vdash$      | $\vdash$ | ╁        | ┢        | Н        | $\dashv$ |    |
| <u>_</u>    | 47         | ╄-       | ╀          | +            | 1  | 4            | ↓_         | 1              | ╄-       | ⊢  | -   | <u> </u>   | 97       | ١.       | <b>├</b> -   | <b>├</b>                                | -        | Н         | -        | -+           | +-             | -   | $\vdash$         |          | $\vdash$       | Н        | <u> </u>      | -        | ╂━       |          | Н        | -        |    |
| <u></u>     | 48         |          | 1-         | ╀_           | 1  | 4_           | ╄-         | 4_             | 1        | 1  | -   |            | 98       | +        | ┺            | ⊢                                       | $\vdash$ | Н         | -        | 4            |                | 4   | $\vdash$         | 148      | ┝              | Н        | <del> </del>  | ╂        | ╂        | $\vdash$ | Н        |          |    |
| <u></u>     | 49         | ㄴ        | 4_         | 4_           | 4_   | 4_           | 丄          | ↓              | 上        | ╙  | 1   | <u></u>    | 99       | ↓_       | ـ            | <b>!</b> —                              | <b>—</b> | $\square$ | 4        | _            | _ļ_            | 1   | <b>—</b>         | 149      | <b>├</b>       |          | _             | ⊢        | ₩        | ├        | Н        | $\dashv$ | _  |
|             | 50         | L.       | 1.         |              |  |              | 1          |                | 1        | 1 .  | i i | ı          | 100      | 1        | 1.           | Ĭ                                       |          | ı         | _        | - 1          | [              | 1   | 1                | 150      | $_{\rm L}$     |          |               | 1        | 1        | <u> </u> | ш        |          |    |